

# air navigator

Name: \_\_\_\_\_



Requirements	Passed
1. Have passed the Air Planner Scoutcraft Badge and be prepared to demonstrate any of those requirements. OR Complete all the requirements for the Air Planner Scoutcraft Badge.	
2. Be able, to point out the features overflown on an imaginary triangular cross-country flight of at least 150 nautical miles flying at a height of 3000 feet above ground level.	
3. Explain what is meant by: a) Altitude. b) Height. c) Transition level. d) Transition altitude. e) Flight level. f) QNH. g) QFE. h) QNE.	
4. Measure the distance and true heading between two points on an aeronautical chart and calculate drift, given the wind strength and direction in scale drawing, without the use of a computer.	
5. Illustrate by means of a simple diagram how a fix can be obtained from two position lines. Briefly describe two ways in which bearings can be obtained in an aircraft, thus enabling position lines to be drawn on a chart. Obtain a fix by transferring one of the two position lines.	
6. Demonstrate a basic knowledge of aeronautical maps and charts with emphasis on Lamberts Conformal and Mercator charts. Show a general knowledge of time: GMT and sunrise and sunset.	
7. Plot the magnetic heading required to make good the track between two places on an aeronautical chart given an airspeed and a forecast wind velocity. Given a time of departure, work out the estimated time of arrival (ETA). From a time, fix indicated on the chart during an imaginary flight, work out the track made good, actual wind velocity, new track required, magnetic heading to steer and revised ETA. This test is to be done using a computer.	
8. Briefly explain the ICAO terms: a) INCERFA. b) ALERFA, and c) DETRESFA.	
9. Show a basic knowledge of radio navigation: a) Radio aid equipment available. b) VOR. c) ADF. d) TACAN. e) Basic operation of ground stations. f) Understand the concept of Global Positioning Systems (GPS).	

2009  
08/20v1

**Badge Awarded**

